










09/873.757

## ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18

Stylesheet Version v18.0

Title of Invention	Mixtures of Growth Hormone Drug-Oligomer Conjugates Comprising Polyalkylene Glycol, Uses Thereof, and Methods of Making Same						
Application Number:	09/873757						
Confirmation Number:	2357						
First Named Applicant:	Nnochiri Ekwuribe						
Attorney Docket Number:	9233-62						
Art Unit:	1654						
Examiner:	Jeffrey E. Russel						
Search string:	( 5830918 or 5843886 or 5849860 or 5853748 or 5854208 or 5856451 or 5866538 or 5866584 or 5874111 or 5898028 or 5902588 or 5905140 or 5907030 or 5922675 or 5932462 or 5942248 or 5948751 or 5952008 or 5952297 or 5962267 or 5968549 or 5969040 or 5981709 or 5985263 or 6004574 or 6011008 or 6025325 or 6034054 or 6042822 or 6043214 or 6051551 or 6063761 or 6093391 or 6113906 or 6165976 or 6177087 or 6191105 or 6200602 or 6211144 or 6248363 or 6251856 or 6258377 or 6268335 or 6306440 or 6309633 or 6310038 or 6323311 or 6335316 or 6342225 or 6506730 ),pn.						
US Patent Documents							
Note: Applicant is not required to submit a paper copy of cited US Patent Documents							
init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
	1	5830918	1998-11-03	Sportsman et al.		514	648
	2	5843886	1998-12-01	Weiner et al.		514	3
	3	5849860	1998-12-15	Hakimi et al.		528	370
	4	5853748	1998-12-29	New		424	439
	5	5854208	1998-12-29	Jones et al.		514	3
	6	5856451	1999-01-05	Olsen et al.		530	402
	7	5866538	1999-02-02	Norup et al.		514	3
	8	5866584	1999-02-02	Cincotta et al.		514	288

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9	5874111	1999-02-23	Maitra et al.
10	5898028	1999-04-27	Jensen et al.
11	5902588	1999-05-11	Greenwald et al.
12	5905140	1999-05-18	Hansen
13	5907030	1999-05-25	Shen et al.
14	5922675	1999-07-13	Baker et al.
15	5932462	1999-08-03	Harris et al.
16	5942248	1999-08-24	Barnwell
17	5948751	1999-09-07	Kimer et al.
18	5952008	1999-09-14	Backstrom et al.
19	5952297	1999-09-14	De Felippis et al.
20	5962267	1999-10-05	Shin et al.
21	5968549	1999-10-19	New et al.
22	5969040	1999-10-19	Hallahan et al.
23	5981709	1999-10-09	Greenwald et al.
24	5985263	1999-11-16	Lee et al.
25	6004574	1999-12-21	Backstrom et al.
26	6011008	2000-01-04	Domb et al.
27	6025325	2000-02-15	Campfield et al.
28	6034054	2000-03-07	DeFelippis et al.
29	6042822	2000-03-28	Gilbert et al.
30	6043214	2000-03-28	Jensen et al.
31	6051551	2000-04-18	Hughes et al.
32	6063761	2000-05-16	Jones et al.
33	6093391	2000-07-25	Kabanov et al.
34	6113906	2000-09-05	Greenwald et al.
35	6165976	2000-12-26	Backstrom et al.
36	6177087	2001-01-23	Greenwald et al.
37	6191105	2001-02-20	Ekwuribe et al.
38	6200602	2001-03-13	Watts et al.
39	6211144	2001-04-03	Havelund
40	6248363	2001-06-19	Patel et al.
41	6251856	2001-06-26	Markussen et al.
42	6258377	2001-07-10	New et al.
43	6268335	2001-07-31	Brader
44	6306440	2001-10-23	Backstrom et al.

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45	6309633	2001-10-30	Ekwuribe et al.	424	85.1
46	6310038	2001-10-30	Havelund	514	4
47	6323311	2001-11-27	Liu et al.	530	303
48	6335316	2002-01-01	Hughes et al.	514	3
49	6342225	2002-01-29	Jones et al.	424	193.1
50	6506730	2003-01-14	Lee et al.	514	12

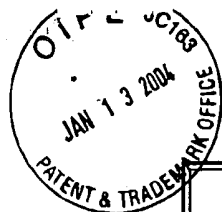
## Remarks

Note: Remarks are not for responding to an office action.

This electronic Information Disclosure Statement (IDS) is submitted in connection with a paper IDS filed January 13, 2004, along with a Request for Continued Examination (RCE) in application number 09/873,757. A fee of \$770.00 has been paid for submission of the RCE and thus no fee is due for the electronic filing of this IDS.

## Signature

Examiner Name	Date
Jeffrey E. Nusse	March 23, 2004



09/873,757

**ELECTRONIC INFORMATION DISCLOSURE STATEMENT**

Electronic Version v18

Stylesheet Version v18.0

<b>Title of Invention</b>	<b>Mixtures of Growth Hormone Drug-Oligomer Conjugates Comprising Polyalkylene Glycol, Uses Thereof, and Methods of Making Same</b>
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Application Number: 09/873757



Confirmation Number: 2357

First Named Applicant: Nnochiri Ekwuribe

Attorney Docket Number: 9233-62

Art Unit: 1654

Examiner: Jeffrey E. Russel

Search string: ( 5206219 or 5283236 or 5286637 or 5292802  
or 5298410 or 5304473 or 5308889 or 5312808  
or 5320840 or 5324775 or 5328955 or 5405621  
or 5413791 or 5415872 or 5428128 or 5438040  
or 5444041 or 5446091 or 5457066 or 5461031  
or 5468478 or 5504188 or 5506203 or 5518998  
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or 5606038 or 5612460 or 5631347 or 5637749  
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or 5707648 or 5714639 or 5738846 or 5747445  
or 5747642 or 5750497 or 5763396 or 5766620  
or 5824638 or 5830853 ).pn.

**US Patent Documents**

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
1	1	5206219	1993-04-27	Desai		514	3
2	2	5283236	1994-02-01	Chiou		514	2
3	3	5286637	1994-02-15	Veronese et al.		435	183
4	4	5292802	1994-03-08	Rhee et al.		525	54.1
5	5	5298410	1994-03-29	Phillips et al.		435	188
6	6	5304473	1994-04-19	Belagaje et al.		435	69.7
7	7	5308889	1994-05-03	Rhee et al.		523	113
8	8	5312808	1994-05-17	Shorr et al.		514	6

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9	5320840	1994-06-14	Camble et al.	424	85.1
10	5324775	1994-06-28	Rhee et al.	525	54.2
11	5328955	1994-07-12	Rhee et al.	525	54.1
12	5405621	1995-04-11	Sipos	424	490
13	5413791	1995-05-09	Rhee et al.	424	422
14	5415872	1995-05-16	Sipos	424	490
15	5428128	1995-06-27	Mensi-Fattohi et al.	530	302
16	5438040	1995-08-01	Ekwuribe	514	3
17	5444041	1995-08-22	Owen et al.	514	2
18	5446091	1995-08-29	Rhee et al.	525	54.1
19	5457066	1995-10-10	Frank et al.	435	68.1
20	5461031	1995-10-24	De Felippis	514	4
21	5468478	1995-11-21	Saifer et al.	424	78.27
22	5504188	1996-04-02	Baker et al.	530	304
23	5506203	1996-04-09	Backstrom et al.	514	4
24	5518998	1996-05-21	Backstrom et al.	514	3
25	5523348	1996-06-04	Rhee et al.	525	54.1
26	5529915	1996-06-25	Phillips et al.	435	188
27	5545618	1996-08-13	Buckley et al.	514	12
28	5550188	1996-08-27	Rhee et al.	525	54.1
29	5606038	1997-02-25	Regen	536	6.5
30	5612460	1997-03-18	Zalipsky	530	391.9
31	5631347	1997-05-20	Baker et al.	530	303
32	5637749	1997-06-10	Greenwald	558	6
33	5643575	1997-07-01	Martinez et al.	424	194.1
34	5646242	1997-07-08	Baker et al.	530	303
35	5650388	1997-07-22	Shorr et al.	514	6
36	5658878	1997-08-19	Backstrom et al.	514	3
37	5681567	1997-10-28	Martinez et al.	424	178.1
38	5693609	1997-12-02	Baker et al.	514	3
39	5693769	1997-12-02	Kahne et al.	536	5
40	5700904	1997-12-23	Baker et al.	530	305
41	5707648	1998-01-13	Yiv	424	450
42	5714639	1998-02-03	Bowman et al.	568	620
43	5738846	1998-04-14	Greenwald et al.	424	85.7
44	5747445	1998-05-05	Backstrom et al.	514	4

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45	5747642	1998-05-05	De Felippis	530	304
46	5750497	1998-05-12	Havelund et al.	514	3
47	5763396	1998-06-09	Weiner et al.	514	3
48	5766620	1998-06-16	Heiber et al.	424	436
49	5824638	1998-10-20	Burnside et al.	514	3
50	5830853	1998-11-03	Backstrom et al.	514	4

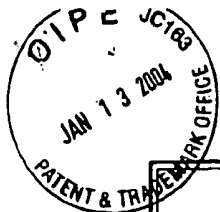
### Remarks

Note: Remarks are not for responding to an office action.

This electronic Information Disclosure Statement (IDS) is submitted in connection with a paper IDS filed January 13, 2004, along with a Request for Continued Examination (RCE) in application number 09/873,757. A fee of \$770.00 has been paid for submission of the RCE and thus no fee is due for the electronic filing of this IDS.

### Signature










Examiner Name	Date
Jeffrey E. Russel	March 23, 2004



09/873.757

**ELECTRONIC INFORMATION DISCLOSURE STATEMENT**

Electronic Version v18  
Stylesheet Version v18.0

<b>Title of Invention</b>	<b>Mixtures of Growth Hormone Drug-Oligomer Conjugates Comprising Polyalkylene Glycol, Uses Thereof, and Methods of Making Same</b>						
<p>Application Number: 09/873757 </p> <p>Confirmation Number: 2357</p> <p>First Named Applicant: Nnochiri Ekwuribe</p> <p>Attorney Docket Number: 9233-62</p> <p>Art Unit: 1654</p> <p>Examiner: Jeffrey E. Russel</p> <p>Search string: ( 3256153 or 3868356 or 3919411 or 3950517 or 4003792 or 4044196 or 4087390 or 4093574 or 4100117 or 4223163 or 4229438 or 4253998 or 4277394 or 4338306 or 4348387 or 4410547 or 4469681 or 4472382 or 4554101 or 4579730 or 4585754 or 4622392 or 4684524 or 4698264 or 4717566 or 4744976 or 4772471 or 4797288 or 4801575 or 4839341 or 4840799 or 4849405 or 4917888 or 4935246 or 4946828 or 4957910 or 4963367 or 4963526 or 4994439 or 5013556 or 5055300 or 5055304 or 5089261 or 5093198 or 5099074 or 5122614 or 5157021 or 5162430 or 5164366 or 5202415 ).pn.</p>							
<b>US Patent Documents</b>							
Note: Applicant is not required to submit a paper copy of cited US Patent Documents							
init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
	1	3256153	1966-06-14	Heimlich		167	82
	2	3868356	1975-02-25	Smyth		260	112.7
	3	3919411	1975-11-11	Glass et al.		424	81
	4	3950517	1976-04-13	Lindsay et al.		424	178
	5	4003792	1977-01-18	Mill et al.		195	63
	6	4044196	1977-08-23	Huper et al.		526	271
	7	4087390	1978-05-02	Shields		260	8
	8	4093574	1978-06-06	Shields		260	8

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9	4100117	1978-07-11	Shields	260	8
10	4223163	1980-09-16	Guillot	568	618
11	4229438	1980-10-21	Fujino et al.	424	177
12	4253998	1981-03-03	Sarantakis	260	8
13	4277394	1981-07-07	Fujino et al.	260	112.5R
14	4338306	1982-07-06	Kitao et al.	424	178
15	4348387	1982-09-07	Brownlee et al.	424	178
16	4410547	1983-10-18	Ueno et al.	424	317
17	4469681	1984-09-04	Brownlee et al.	424	178
18	4472382	1984-09-18	Labrie et al.	424	177
19	4554101	1985-11-19	Hopp	260	112.5R
20	4579730	1986-04-01	Kidron et al.	424	19
21	4585754	1986-04-29	Meisner et al.	514	8
22	4622392	1986-11-11	Hong et al.	536	29
23	4684524	1987-08-04	Eckenhoff et al.	424	469
24	4698264	1987-10-06	Steinke	428	402.2
25	4717566	1988-01-05	Eckenhoff et al.	424	438
26	4744976	1988-05-17	Snipes et al.	424	408
27	4772471	1988-09-20	Vanlerberghe et al.	424	450
28	4797288	1989-01-10	Sharma et al.	424	476
29	4801575	1989-01-31	Pardridge	514	4
30	4839341	1989-06-13	Massey et al.	514	4
31	4840799	1989-06-20	Appelgren et al.	424	493
32	4849405	1989-07-18	Ecanow	514	3
33	4917888	1990-04-17	Katre et al.	424	85.91
34	4935246	1990-06-19	Ahrens	424	490
35	4946828	1990-08-07	Markussen	514	3
36	4957910	1990-09-18	Sutton et al.	514	182
37	4963367	1990-10-16	Ecanow	424	485
38	4963526	1990-10-16	Ecanow	514	3
39	4994439	1991-02-19	Longenecker et al.	514	3
40	5013556	1991-05-07	Woodle et al.	424	450
41	5055300	1991-10-08	Gupta	424	409
42	5055304	1991-10-08	Makino et al.	424	465
43	5089261	1992-02-18	Nitecki et al.	424	85.2
44	5093198	1992-03-03	Speaker et al.	428	402.21



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45	5099074	1992-03-24	Mueller et al.	568	617
46	5122614	1992-06-16	Zalipsky	548	520
47	5157021	1992-10-20	Balschmidt et al.	514	3
48	5162430	1992-11-10	Rhee et al.	525	54.1
49	5164366	1992-11-17	Balschmidt et al.	514	3
50	5202415	1993-04-13	Jonassen et al.	530	303

### Remarks

Note: Remarks are not for responding to an office action.

This electronic Information Disclosure Statement (IDS) is submitted in connection with a paper IDS filed January 13, 2004, along with a Request for Continued Examination (RCE) in application number 09/873,757. A fee of \$770.00 has been paid for submission of the RCE and thus no fee is due for the electronic filing of this IDS.

### Signature

Examiner Name	Date
Jeffrey E. Russel	March 23, 2004

Substitute form 1449A/PTO		<b>Complete if Known</b>			
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		Application Number	09/873,757		
		Filing Date	06/04/2001		
		First Named Inventor	Nnochiri N. Ekwuribe		
		Group Art Unit	1654		
		Examiner Name	J. Russel		
Sheet	1	of	5	Attorney Docket Number	9233-62

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	T
		Office	Number	Kind Code (if known)			
JR	1	EP	0 822 218	A2	Glenn A. Miller et al.	02/04/1998	
JR	2	JP	01207320		Daicel Chem Ind Ltd	08/21/1989	
JR	3	EP	0 483 465	B1	Salama et al.	08/02/1995	
JR	4	EP	0 511 903	A2	Medgenix Group, S.A.	11/04/1992	
JR	5	DE	196 32 440	A1	BASF AG	02/19/1998	
JR	6	EP	0 031 567	A2	Takeda Yakuhin Kogyo Kabushiki Kaisha	07/08/1981	
JR	7	EP	0 597 007	B1	Smithkline Beecham Corporation	10/16/1996	
JR	8	EP	0 621 777	B1	Alfatec-Pharma GmbH	09/11/1996	
JR	9	EP	0 797 615	B1	The University of Nottingham	01/13/1999	
JR	10	GB	1 492 997		Derek George Smyth	11/13/1977	
JR	11	JP	1 254 699		Kodama Co., Ltd.	10/11/1989	
JR	12	WO	01/12230		Park et al.	02/22/2001	
JR	13	WO	93/01802		Debio Recherche Pharmaceutique, S.A.	02/04/1993	
JR	14	WO	95/09831		Piero Del Soldato et al.	04/13/1995	
JR	15	WO	95/30641		Nicox Limited	11/16/1995	
JR	16	WO	98/07745		Micrologix Biotech, Inc.	02/26/1998	
JR	17	WO	99/65941	A1	King College London et al.	12/23/1999	
JR	18	WO	99/32134		Enzon Inc.	07/01/1999	

OTHER NON PATENT LITERATURE DOCUMENTS					T
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published			
JR	19	Abuchowski, A. and F. F. Davis "Soluble Polymer-Enzyme Adducts" pp. 367-383, <i>Enzymes as Drugs</i> , Ed. J. S. Holcenberg, John Wiley (1981)			
JR	20	Agarwal et al. "Polymethacrylate-based Microparticulates of Insulin for Oral Delivery: Preparation and In Vitro Dissolution Stability in the Presence of Enzyme Inhibitors" <i>International Journal of Pharmaceutics</i> 225:31-39 (2001)			
JR	21	Akiyama et al. "The Synthesis of New Derivatives of 1-β-D-Arabinofuranosylcytosine" <i>Chem. Pharm. Bull.</i> 26(3):981-984 (1978)			
JR	22	Allaudeen et al. "Orally Active Insulin: A Single Insulin Conjugate Selected for Future Studies" 60th Annual Meeting of the American Diabetes Assoc., Atlanta, GA, June 2000 (Abstract)			
JR	23	Anderson et al. "HIM2, a Novel Modified Insulin, has Improved Systemic Pharmacokinetics in Normal Dogs, Compared to Unmodified Insulin" American Diabetes Association 62nd Annual Meeting, June 2002 (Abstract)			
JR	24	Ansell et al. "Application of Oligo-(14-amino-3,6,9,12-tetraoxatetradecanoic acid) Lipid Conjugates as Steric Barrier Molecules in Liposomal Formulations" <i>Bioconjugate Chem.</i> 10:653-666 (1999)			
JR	25	Aoshima et al. "N <sup>4</sup> -Behenoyl-1-β-D-Arabinofuranosylcytosine as a Potential New Antitumor Agent" <i>Cancer Research</i> 37:2481-2486 (1977)			
JR	26	Baker, D. C. et al. "Prodrugs of 9-β-D-Arabinofuranosyladenine. 1. Synthesis and Evaluation of Some 5'-(O-Acyl) Derivatives" <i>J. Med. Chem.</i> 21(12):1218-1221 (1978)			
JR	27	Banting et al. "Pancreatic Extracts in the Treatment of Diabetes Mellitus: Preliminary Report" <i>Can. Med. Assoc. J.</i> 145(10):1281-1286 (1991)			
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Examiner Signature	Jeffrey E. Russel	Date Considered	March 23, 2004
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Substitute form 1449/APTO		<b>Completeness Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		Application Number	09/873,757
		Filing Date	06/04/2001
		First Named Inventor	Nnochiri N. Ekwuribe
		Group Art Unit	1654
		Examiner Name	J. Russel
(use as many sheets as necessary)		Attorney Docket Number	9233-62
Sheet	2	of	5

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			Filing Date	06/04/2001	
			First Named Inventor	Nnochiri N. Ekwuribe	
			Group Art Unit	1654	
			Examiner Name	J. Russel	
Sheet	3	of	5	Attorney Docket Number	9233-62

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		First Named Inventor	Nnochiri N. Ekwuribe
		Group Art Unit	1654
		Examiner Name	J. Russel
Sheet 4 of 5	Attorney Docket Number	9233-62	

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09/873,757

**ELECTRONIC INFORMATION DISCLOSURE STATEMENT**

Electronic Version v18  
Stylesheet Version v18.0

<b>Title of Invention</b>	Mixtures of Growth Hormone Drug-Oligomer Conjugates Comprising Polyalkylene Glycol, Uses Thereof, and Methods of Making Same
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Application Number:	09/873757	
Confirmation Number:	2357	
First Named Applicant:	Nnochiri Ekwuribe	
Attorney Docket Number:	9233-62	
Art Unit:	1654	
Examiner:	Jeffrey E. Russel	
Search string:	( 5889153 or 20020160938 or 20030027748 ),pn.	

### US Patent Documents



Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
	1	5889153	1999-03-30	Suzuki et al.		530	350

### US Published Applications

Note: Applicant is not required to submit a paper copy of cited US Published Applications

init	Cite.No.	Pub. No.	Date	Applicant	Kind	Class	Subclass
	1	20020160938	2002-10-31	Brandenburg et al.		514	3
	2	20030027748	2003-02-06	Ekwuribe et al.		514	3

### Remarks

Note: Remarks are not for responding to an office action.

This electronic Information Disclosure Statement (IDS) is submitted in connection with a paper IDS filed January 13, 2004, along with a Request for Continued Examination (RCE) in application number 09/873,757. A fee of \$770.00 has been paid for submission of the RCE and thus no fee is due for the electronic filing of this IDS.